

## ABSTRACT

The present invention is to provide a method of treatment which inhibits proliferation and invasion of brain tumor cells in developing animal brain tumor cells, and a method for measuring proliferation/invasion activity of brain tumor cells, in the brain tumor cells, preferably, in glioblastoma. Proliferation and invasion of brain tumor cells are inhibited by regulating  $\text{Ca}^{2+}$  permeability by glutamate receptor subunits in developing animal brain tumor cells. Regulation of  $\text{Ca}^{2+}$  permeability by glutamate receptor subunits can be conducted by introducing the GluR2 gene into AMPA-type glutamate receptors in brain tumor cells. Further, the present invention provides a method for measuring proliferation/invasion activity of brain tumor cells by detecting/measuring the expression of glutamate receptor subunits in developing animal brain tumor cells.